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From a Surgical Standpoint.

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Peritonitis from a Surgical Standpoint.

By A. V. L. Brokaw, M. D.

SAINT LOUIS

Demonstrator of Anatomy and Operative Surgery, Missouri Medical College; Surgeon to St. John's Hospital.

THE treatment of peritonitis until recently has been clouded in superstition and ignorance. This would possibly have continued indefinitely, but for the scalpel of aggressive surgeons, who have learned pathology at the operating table, not in the dead house. The work of such men as Price and Tait has overthrown existing doubts and the fallacy of such treatment as that advocated by blind theorists. The opium, poultice, iodine and blister treatment of the fell disease seems about exploded. The results of tho old treatment have furnished statistics (to say the least) frightful. The records of the autopsy chambers should be used as an argument for some other treatment, than that of the past. The mortality has been too great to allow of any hesitation or consideration of the weak, vacillating arguments of the theoretical.

Peritonitis is as assuredly a surgical disease as any the surgeon is called upon to treat. Every practitioner should, in emergency, be capable of meeting the immediate indications. Persistency of symptoms always means section, irrigation and drainage.

To classify the varieties of peritonitis as to form, no little difficulty is met with, for the disease often presents itself when the classical symptoms are not all apparent. The best classification as to cause that might be mentioned would be the following:

I. Traumatic Peritonitis (developing after accidental trauma or surgical operations).

II. Peritonitis due to ulcerative perforation of abdominal or pelvic viscera (appendix, intestines, stomach, Fallopian tubes, gall-bladder, bladder)

III. Peritonitis due to incarcerated hernia and intestinal obstruction.

IV. Peritonitis due to rupture of intra-abdominal abscesses or tumors (ovarian or other cystic tumors).

V. Puerperal peritonitis.

VI. Peritonitis from obscure and undetermined causes.

VII. Localized peritonitis.

VIII. Tubercular peritonitis.

It is not my intention to give the details of the special procedures indicated for each and every case, but only the great principles of treatment

which should govern all cases of peritonitis. When well-defined symptoms of peritonitis exist, nothing short of radical procedures will give perfect results. Generally speaking, abdominal section is assuredly indicated in the majority of cases, and holds out the only reliable means of effecting a cure.

In certain cases of mild localized peritonitis of pelvic origin, saline or calomel purgation will at times relieve existing symptoms, and necessarily these remedies should precede section if the symptoms are not too threatening. The high percentage of deaths in cases of peritonitis treated by laparotomy must be attributed to late operations.

With the definite symptoms of pus, no matter where located, there is but one indication: ovacuation and intelligent after-treatment. A few hour's hesitation and all may be lost. No matter how low the patient's condition, even if in a state bordering on collapse, well directed surgical efforts may succeed. It may be necessary to do an incomplete operation in certain cases to tide over an existing unfortunate state. Under an improved condition of the patient, the incomplete operation may be finished at a later date, with all tho surgical nicety of an operation of election.

We hear on all sides, of certain surgeons refusing to operate when acute inflammatory symptoms are present. These same gentlemen select only favorable cases for operation and are derelict in their duty to their patients. They operate only for statistics, not for the good of the unfortunates. We owe it to humanity to do what the exigencies demand, even if we jeopardize our good statistics.

In peritonitis, as in other desperate diseases, the situation should be explained to the patient and the consent obtained to do the necessary operation. Whatever is done in cases of peritonitis should be done promptly, without hesitancy or lack of decision. If the medical treatment of peritonitis does not give prompt, quick results, it should be put aside and a rational measure adopted, that, is section. The pathologically ignorant and the conservative, so-called, always counsel against the early use of the knife. If a condition demands the use of the knife at all, it should be as early as possible. Nothing is gained by waiting.

I have had in the past few months the positive evidence of good results from early operative interference in cases of peritonitis, and call to mind cases in which patients, on the verge of dissolution, were saved by prompt surgery. The following brief synopsis of a few cases may be of interest, and illustrative of the measures advocated:

Case 1: Child, seven years of age, seen in consultation with Dr. A. C. Robinson. Child sent to St. John's Hospital in a low, critical condition; pulse weak, thready; temperature 104; perityphlitic abscess; all the signs of peritonitis. Immediate operation; gangrenous appendix; ruptured perityphlitic abscess into peritoneal cavity, pelvis filled with over a pint of pus; intestines, omenta, everything matted together by recently formed lymph. Peritonitis almost general. Abdomen was flushed out with several gallons of hot water, large and small abscesses, cavities broken up, all adhesions separated; drainage tube, gauze, packing, recovery.

Case 2: Mrs. Annie E., referred to me by attendant. I found upon examination, localized symptoms of peritonitis; made section, with irrigation,

evacuation of over a gallon of pus. Pus-cavity extending from floor of pelvis in front and behind the uterus upwards to the liver. Pelvis and abdomen thoroughly packed with gauze. Rapid recovery.

Case 3: Mrs. W. Right and left pyo-salpinx. Condition very critical; temperature 105.2° when placed upon the table. All symptoms of an acute peritonitis present. Immediate section: large abscess; rotten ovaries and tubes; peritonitis from a leaky tube; irrigation, drainage, recovery.

This patient induced an abortion upon herself some weeks previously by passing a hair-pin into the os and injecting cold water into the uterus with a Davidson's syringe.

Case 4: Miss D. Repeated attacks of peritonitis. Temperature 104.4° at time of operation. On section, found a ruptured pelvic abscess, large pus-tubes; irrigation, drainage, gauze-packing, recovery.

Case 5: Mrs. I. Secondary laparotomy for peritonitis following a section done seven days before. Temperature 104. Abdomen re-opened, adhesions broken up, free irrigation, drainage, recovery.

Cases 6 and 7: Peritonitis following accidental abortion.

Cases 8 and 9: Peritonitis following criminal abortion. These cases might be added to, but are sufficient to illustrate the value of the treatment recommended. But one death occurred, and all were what might be truly considered desperate cases. The case which terminated fatally was one of acute general peritonitis of the most malignant type, occurring in a young girl upon whom a criminal abortion had been performed.

The case was seen by my father and treated by him on general medical principles. Saline purgatives and other measures not relieving existing symptoms, the condition of the patient becoming worse, I was asked to see the case. The patient's statements were misleading, and, as afterwards found, utterly unreliable. All attempts at thorough methodical examination were objected to by the patient, who threw all possible obstacles in our way. When consent was given to a digital examination, it proved unsatisfactory because of the objections and pain experienced by the patient. An examination made at a later hour revealed nothing of a positive nature as far as the cavity of the uterus was concerned. The discharge was scanty and not offensive, the vaginal vault was board-like, thickened. Two immovable masses could be readily made out on either side of the uterus. A diagnosis of acute peritonitis and abscess of the ovaries was made at this time.

The abdomen was exquisitively painful and greatly swollen. The salines were ordered continued, together with hot applications to the abdomen, and hot vaginal douches.

Late the following evening I was summoned to see the patient who had suddenly grown much worse. I came prepared to operate and was accompanied by Drs. Mooney, Newman, Temm, McLean, and Fitzpatrick. I found the patient in an almost dying condition. Immediate preparation was made for an operation under unfavorable circumstances, at midnight.

The patient had a temperature of 104. Pulse woak, 142. Under anæsthesia a median incision was made. On opening the peritoneum, over a quart of thin, ichorous, foul-smelling, purulent fluid escaped. The intestines

were congested and greatly distended; flocculi of lymph and recent adhesions everywhere; ovaries enlarged, rotten and friable; the tubes grangrenous, so soft and disintegrated that Dr. Mooney, who assisted me, actually tore off the right ovary and tube while holding the structures, when the ligatures were being applied. The pelvis was rapidly cleaned out and the abdomen thoroughly flushed. A tube was inserted and the abodomen closed. Patient reacted slowly.

In the morning patient was seemingly better, temperature normal and everything appeared more favorable. In the afternoon the temperature began to rise, and thinking that there might be something in the uterus to account for the rise in temperature, the patient was given a few whiffs of chloroform, and the cavity of the uterus rapidly curetted. Nothing of consequence came away. A few small clots and some disintegrated tissue were all that could be found. Before curetting, digital examination revealed nothing in the cavity or the womb.

In this case the progress of the peritonitis had been most rapid and the patient was profoundly septic. While placed in a most favorable condition after the section, the sepsis was so general that all efforts failed and the woman succumbed. This case teaches us that early operative interference is absolutely indicated and that there are forms of puerperal peritonitis so rapidly fatal that the delay of a few hours may place the patient beyond all surgery.

The curette is not to be relied upon the minute after the infection has extended to other pelvic structures. We might as well expect, by putting out the fire in a grate, to check a general conflagration raging in a house. Brilliant results have recently been recorded of patients, dying from puerperal peritonitis, saved by a section. Every surgeon who is in touch with the advanced ideas of the day, agrees that no other treatment can avail or hold forth any hope in these desperate cases. In a correspondence with the greatest living authorities in America I found perfect accord on this subject. In my opinion no case of general peritonitis can recover without operation, and cases reported recovering without operation had best be relegated to the shelves of fiction, or, to be charitable, passed by as an evidence of ignorance on the part of the reporter.

Cases of localized peritonitis frequently recover. No one with any experience doubts that, and occasionally even extensive inflammations of the peritoneum may subside. It has been estimated that the peritoneum has an area of 2,700 square inches. When this great area is considered, the extent of a general inflammation is frightful to contemplate.

All cases of peritonitis do not present the same symptoms, and with an increasing experience we find that a diagnosis of some forms of peritonitis is not always easy. The classical symdtoms being often masked, or the usual collective symptoms not well marked. Some of them may be absent. A high temperature is not essential. A subnormal temperature may be met with and is relatively frequent. The abdomen may contain quarts of pus and few symptoms of value may be present. Abdominal distension may or may not be well marked. Fatal forms may occur without decided macroscopic

changes. It is just this latter class of cases in which the onslaught of the disease is sudden and the fatal result rapid.

Peritonitis may be followed by early septic endocarditis and pericarditis, a frequent cause of early fatal issue. Tympanites always adds to the risk. It may mean additional auto-infection and liberation of the *bacterium coli commune* or other microbes. There is no single symptom to be relied upon. The pulse is usually thin and thready, but may be full and strong. The most constant symptom is pain on pressure, and next to it, the facial expression, the expression of anxiety and alarm. Rigidity of a muscle or a group of muscles is always a sign of positive value. The amount of pain and suffering of the patient may be very great, but cases are occasionally met with in which the pain is easily borne.

Opium should be withheld, if possible, until a diagnosis is established. Its influence masks all positive symptoms and leaves us in the dark.

A. W. L. Brokaw